

Remarks

1. Summary of Office Action

In the office action mailed January 23, 2007, the Examiner rejected all of the pending claims 6, 12, 15-20, and 27-30 under 35 U.S.C. § 103 as being allegedly obvious over a combination of five prior art references selected by the Examiner, namely U.S. Patent No. 6,460,036 (Herz), U.S. Patent No. 6,654,735 (Eichstaedt), U.S. Patent No. 5,821,929 (Shimizu), U.S. Patent No. 5,724,567 (Rose), and U.S. Patent No. 5,825,789 (Liu).

2. Status of the Claims

Applicant has amended claim 6 to correct a typographical error that created an antecedent basis issue not noticed by the Examiner. Still pending claims 6, 12, 15-20, and 27-30, of which claims 6, 12, and 27 are independent and the remainder are dependent.

The invention as claimed is directed to a method for measuring and using an Internet user's interest in a given subject. Each independent claim provides for establishing a count of web pages sent to the user that each contain at least a threshold number of keywords related to the given subject, where the threshold is non-zero. Further, each independent claims provides for establishing a "capped page keyword count" for each web page sent to the user by counting up all of the keywords found in the web page that are related to the given subject. The capped page keyword count is capped such that its value is not greater than a predetermined maximum number of keywords. The capped page keyword count is then summed to establish a count of keywords that is "not greater than the count of web pages multiplied by the predetermined maximum number of keywords."

Independent claims 6 and 12 further recite carrying out various steps at a mobile IP home agent configured to pass IP communications to the user. Mobile IP is a very well known

communications protocol that is designed to allow mobile device users to move from one network to another while maintaining a permanent IP address.

Independent claim 12 also includes limitations requiring establishment of (i) a total page count representing the number of web pages sent to a user; (ii) a subject-specific page count representing the number of web pages sent to the user that have a threshold number of keywords related to the subject and; (iii) the count of keywords related to the subject that appear in the web pages. In claim 12, these values are used in combination to establish a measure of the user's interest in the subject matter. Dependent claim 15 then provides that values (i)-(iii) be combined by multiplying the count of keywords (K) by the subject-specific count (S) divided by the total page count (P). $[(K)(S)/(P)]$.

3. Response to § 103 Rejections

As noted above, the Examiner rejected all of the pending claims as being allegedly obvious over a combination of five references.

First, Applicant submits that it would have been extremely unlikely for a person of ordinary skill in the art to have combined together so many references in the manner suggested by the Examiner. Applicant recognizes that the mere number of references is not a sufficient basis *in and of itself* to establish lack of a *prima facie* obviousness. M.P.E.P. § 2145(V). However, Applicant submits that the Examiner's use of so many hand-picked references seems to suggest some level of improper, subjective hindsight analysis using Applicant's claims as a blueprint, which the M.P.E.P. prohibits. *See* M.P.E.P. § 2143 ("The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.")

Second, and perhaps more importantly, the art cited by the Examiner does not teach the invention recited in Applicant's claims. Therefore, even if we disregard the hindsight analysis, the Examiner has failed to produce a *prima facie* case of obviousness, and the claims should therefore be allowed.

a. The Cited Art Does not Disclose or Suggest the Claimed Use of a Mobile IP Home Agent.

Claims 6 and 12 recite that elements of Applicant's invention are carried out at a "mobile IP home agent".

In rejecting claims 6 and 12, the Examiner stated that the cited Herz, Eichstaedt, Shimizu, and Rose references "did not expressly teach the algorithm occurring in a mobile IP home agent", and the Examiner then turned to the Liu reference in an effort to establish that the prior art in some way suggests carrying out the claimed elements at a mobile IP home agent.

Yet in doing so, the Examiner did not point to any objective evidence (in the references or in the art generally) that would have logically suggested carrying out the claimed elements at a mobile IP home agent at the time of Applicant's invention.

After admitting that Herz, Eichstaedt, Shimizu, and Rose do not teach the algorithm occurring in a mobile IP home agent, the Examiner asserted that "Liu discloses utilizing a home user agent to transfer data from a home user cache 51 to be placed in the secondary cache of a foreign agent to be used by the mobile device (col. 7, lines 1-14)." The Examiner then stated that "[o]ne of ordinary skill in the art would realize the benefits of utilizing the algorithm above in the home agents in order to prefetch data of interest to the user, thereby reducing data fetch times and thereby increasing the throughput of the overall system." (See office action, at page 5, lines 1-7).

The Examiner's statements do not point to any objective suggestion to carry out Applicant's claim functions *at a mobile-IP home agent* as recited in claims 6 and 12.

First, the Examiner has not even alleged that Liu teaches carrying out any particular functions at a mobile IP home agent. Rather, the Examiner has alleged that Liu teaches functions carried out at a "home user agent" or at a "home agent." Yet Applicant's claim recites carrying out functions at a *mobile-IP home agent*, which is exceptionally well known in the art. (Indeed, Liu himself notes tangentially at column 5, lines 57-58 that mobile-IP is well known.) Those of ordinary skill in the art would readily recognize that the "mobility agent" and "mobile-floating agent" disclosed in Liu are not mobile-IP home agents.

In fact, the only mention in Liu of a "home agent" occurs at column 8, lines 35-47, where Liu notes that in past systems a request for information would propagate to a home agent, and a response would be provided to a foreign agent. Liu proceeds to explain, however, that Liu's invention *contrasts* with that, through use of a mobile-floating agent, which is pre-populated with data/services at the mobile station's expected destination, so that there is a reduced need to request the data/services once the mobile station arrives.

M.P.E.P. §§ 2142 and 2143 dictate that an Examiner bears the initial burden to establish a *prima facie* case of obviousness of a claimed invention, and that the applicant is under no obligation to submit evidence of nonobviousness if the Examiner fails to produce a *prima facie* case. One of the key requirements of establishing a *prima facie* case of obviousness is establishing that all of the limitations of the claimed invention are taught or suggested by the prior art. *See* M.P.E.P. § 2143.03. In this case, the Examiner failed to establish the requisite *prima facie* case of obviousness of claims 6 and 12, because the Examiner admitted that Herz,

Eichstaedt, Shimizu, and Rose do not teach carrying out Applicant's claim elements at a mobile-IP home agent and the Examiner never asserted that Liu discloses or suggests doing so.

The sole portion of Liu that the Examiner cited is column 7, lines 1-14, which the Examiner characterized as disclosing "utilizing a home user agent to transfer data from a home user cache 51 to be placed in the secondary cache of a foreign agent to be used by the mobile device (col. 7, lines 1-14)." A careful reading of Liu, however, shows that that paragraph merely teaches the idea of pre-populating a cache in a destination network with data from a home network (so that the data will be available to the mobile station when the mobile station arrives). The paragraph does not mention anything about actions at a mobile-IP home agent.

With that, the Examiner then concluded that those of ordinary skill in the art would recognize the benefits of using Applicant's algorithm in a "home agent" in order to prefetch data of interest to the user, thus reducing data fetch times and increasing system throughput. This conclusion by the Examiner, however, is unsupported by any objective evidence cited by the Examiner. First, the Examiner has not pointed to any objective evidence that suggests carrying out Applicant's invention at a *mobile-IP home agent*, but rather has at best noted that a cache in a destination network can be pre-populated with data from a home cache. Second, even if Liu in some way suggested prefetching data of interest to a user, the Examiner has not pointed to any objective evidence in Liu or elsewhere (e.g., any knowledge generally in the art) that would suggest having a *mobile-IP home agent* carry out functions to determine what particular data or information would be of interest to the user.

Given that the Examiner has admitted that Herz, Eichstaedt, Shimizu, and Rose do not teach carrying out Applicant's claim elements at a mobile-IP home agent, and given that Liu fails to make up for that deficiency and that the Examiner has not cited any objective evidence that

suggests carrying out those claim elements at a mobile-IP home agent, the Examiner has not established *prima facie* obviousness of claims 6 or 12. Thus, Applicant submits that claims 6 and 12 are allowable. Further, without conceding the Examiner's additional assertions, Applicant submits that claims 15-20 are allowable for at least the reason that they depend from allowable claim 12.

**b. The Cited Art Does Not Disclose or Suggest
Use of a Count Keyword Threshold**

Claims 12 and 27 provide for establishing a count of web pages sent to a user that each contain *at least a threshold number of keywords related to the given subject*. Beneficially, the threshold number may allow for greater specificity in identifying interest in a given subject and also may reduce server load, for instance.

The Examiner has asserted that Herz teaches this function of counting pages that each contain at least a threshold number of keywords related to the given subject, citing to Herz at column 13, lines 5-17, column 15, lines 25-34, and column 17, lines 10-24. Applicant has reviewed these portions of Herz, however, and submits that they do not teach this claim element, for at least the reasons set forth in Applicant's last responses.

In the latest office action, when responding to Applicant's arguments, the Examiner asserted that in order for profile generation services in Eichstaedt to take place, "then the page must contain at least one keyword for that particular interest (i.e., the profile would not consider "boating" as an interest if none of the pages contain anything about boats)." (*See* office action, at section 6.) However, the Examiner did not point to any specific teachings or suggestions of this concept in the extensive Herz or Eichstaedt references. For instance, the Examiner has not pointed to any objective disclosure of counting a number of web pages sent to a user that each contains at least a threshold (non-zero) number of keywords related to the given subject.

Because the Examiner has not cited objective evidence that suggests modifying the cited art to include Applicant's claim element of "establishing a count of web pages sent to a user that each contains at least a threshold number of keywords related to the given subject, wherein the threshold is non-zero", the Examiner has failed to establish *prima facie* obviousness of claims 12 and 27. Therefore, Applicant submits that claims 12 and 27 are allowable. Further, without conceding the Examiner's additional assertions, Applicant submits that claims 15-20 and 28-30 are allowable for at least the reason that they depend from allowable claim 12 or allowable claim 27.

4. Conclusion

In view of the foregoing, Applicant submits that all of the claims are allowable, and Applicant therefore respectfully requests favorable reconsideration and allowance of the claims.

Should the Examiner wish to discuss this case, the Examiner is invited to call the undersigned at (312) 913-2141.

5. Deposit Account Authorization

Applicant authorizes the office to charge any underpayment or credit any overpayment to Deposit Account No. 210765.

Respectfully submitted,

**McDONNELL BOEHNEN
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Dated: April 23, 2007

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